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CIVIL SOCIETY POLICY FORUM

Hunger and Malnutrition: Challenges and Solutions

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This session, co-sponsored by CARE and the World Bank, aimed to qualify and quantify the impact of malnutrition and hunger on the most vulnerable echelons of the population in developing countries and the possible solutions offered by new technologies and integrated approaches. Panelists for the session included *John Hoddinott* (Senior Research Fellow, IFPRI), *Chris Shea* (Senior Vice-President, General Mills Foundation), *David Kauck* (Senior Policy Advisor, CARE), and *Eija Pehu* (Science and Technology Advisor, World Bank), with *Kim Hamilton* (Senior Policy Advisor, Gates Foundation) as chair.

Kim Hamilton opened the floor by underlining how the more than 920 million people chronically malnourished in the world represent a hidden emergency that needs to be brought to the fore of the development debate with strong research-based advocacy. She also highlighted the high economic costs generated by poorer health, lower cognitive functions, and overall lower productivity of the affected population.

John Hoddinott described the finding from a study on nutrition carried out in Guatemala in the early 1970s and recently updated by his institute in a follow-up study. In 1969 four Guatemalan villages were randomly selected to carry out a feeding experiment with free preventive healthcare of young children (0-7 years old at the start of the program, plus all new-born for the length of the program, though 1977), using either high protein/high micronutrient gruel (atole, in two villages), or a sugary/high micronutrient drink (fresco, in the other two villages). Extensive anthropological statistics were collected for the 2,392 participants to the study, 1,483 of whom (62%) were available for a follow up study in 2002-04. The new assessment looked at socio-economic indicators (e.g. occupation, income per hours worked), physical status (health, weigh, height, and strength), and cognitive skills.

The most striking finding was that, on average, children who had not experienced stunting, they experienced 31% higher wages, with a larger effect on men (57%) than women (22%). In addition, the extra nutrition had the same effect as increasing

¹ This summary note was prepared by Paola Scalabrin of the World Bank's External Affairs Department. If you have any comments or questions on the note please send an email to civilsociety@worldbank.org.

educational attainments by 4 grades! The improved cognitive functions (e.g. reading, vocabulary, cognitive abilities) carried into adulthood and were found to be the drivers for the higher income, not the extra muscle or height. The highest effect for both sexes (46% wage increases) were shown by feeding babies the first 36 months with the high protein/high micronutrient (atole). These preliminary results indicate a significant causal relationship between nutrition, skills attainment, and earning capabilities, with huge implications for the economic productivity of poor countries.

Chris Shea then talked about the role of private companies in development and the untapped potential they represent in terms of technology and skills transfers in the food processing and distribution areas. This is particularly true in the areas of voluntary activities of their retiring staff, and through corporate social responsibility activities beyond their traditional geographical boundaries. A case in point is the General Mills Foundation, the social arm of General Mills (6th largest food company worldwide, with 30,000 employees and market presence in 100 countries) which a few years ago started the African Women and Children Hunger project in Malawi. The program is based around three components:

- Local school feeding, which has reached to date 4,400 children and trained 200 people in food preparation, handling, and nutrition.
- Integrated food and agricultural innovation in collaboration with CARE and World Vision, which has trained 500 household farmers in livestock, fishing and poultry techniques.
- Science and technology transfers to local agro-processing SMEs for better food packaging, fortification, storage, and safety.

To date, 200 volunteers have given 10,000 hours of their time per year while the company has provided relevant facilities, skills, and ingredients.

In Zambia, their program is working with local communities to create economic alternatives to poaching of elephants, and to date has involved 30,000 small farmers. This approach can be scaled-up and undertaken by other companies too.

David Kauck, speaking from his 17 years in the field with CARE, steered the attention to the game-changing events of the last 3 years: the food and energy crisis in 2006-08 which eroded purchasing power and food access to large swathes of the population in developing countries; and the on-going financial crisis which is depressing export earnings, FDI flows, remittances, wage earnings, and jobs.

These sudden shocks triggered simultaneous humanitarian crises in different parts of the world, amplified by the uncertainty and lack of clear information. CSOs are not set up to respond to this kind of crises, but in order to do so there is need of:

- Real time local information on the impact of the shock and the coping strategies adopted by poor people – the current early warning systems by FAO, WFP and

USAid are imperfect and largely geared to countries with systemic, chronic problems.

- More flexible funding mechanisms in order to overcome the existing rigidities with ongoing project funding and full emergency situations. Tackle crises as they arise with appropriate social protection measures.
- Untied food assistance, so that the US can contribute with cash, instead of US produce only. This would allow for a more appropriate response to crises via procurement of local/regional products and/or vouchers mechanisms, limiting unintended consequences on local food production.

All together, there is no single food assistance approach appropriate to all situations. Every situation needs to be analyzed and addressed in the manner most appropriate to local conditions. CSOs need to work together to advocate for these policy changes.

Eija Pehu in the last presentation stressed the key role of agricultural research and innovation to address hunger and malnutrition, since 75% of the poor live in rural areas and work in agriculture. Lifting them out of poverty is a multi-dimensional challenge, with economic growth linked to environmental sustainability and climate change.

In the impressive growth of food consumption across countries that took place in the last decades, with per capita intake values reaching the 3,000 calories average in developing countries, a major role has been played by the green revolution. Improved seeds, fertilizers, and pest control methods ensured increases of more than 3% (per year) over the past 20 years in wheat and rice yields. However, the payoff of this first green revolution is almost spent -- yields are flattening out, water stress and land degradation are increasing, and in 2007 there were 80 million more hungry people than in 1990-92. A new green revolution is needed, to bring about drought-resistant seeds and inputs for rain-fed agriculture, which accounts for 95% of Sub-Saharan Africa agricultural activities.

Scientists in many developing countries are also working on micronutrients to address hidden hunger: the next 2-5 years should bring about new enriched seeds including vitamin A-rich rice, Zinc-rich wheat, and higher nutrition yellow potatoes. Much work will need to be done to ensure the rapid adoption and acceptance of these improved foods. At the same time, water scarcity in the hot spots of climate change will have heavy implications on health and hygiene. This complex challenge will require much better coordinated inter-sectoral approaches, with a crucial role for community-driven development.

These presentations were followed by a general discussion by participants which included: whether these programs actively included people with disabilities, especially women and children (women and marginalized groups are included, but sound systemic proposals are most welcome); whether there are clear cost/benefit analyses to guide program choices in time of scarcity (micronutrients have the highest return of all); how to avoid small farmers' dependency from multinationals for seeds and fertilizers, especially in Africa; gender equality keeps pace with the green revolution in Africa, accompanied by improved early childhood development measures; and and how to incorporate

considerations of mental health in emergency projects since food insecurity is a major source of stress.